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ABSTRACT

A major longitudinal study of California community college students involved following a sample of 35,000 students for three and one-half years. Near the end of the study, enrollment and performance data for students who transferred to the University of California and the California State University and Colleges were collated through 1978. The transfer study focused on: (1) student characteristics (sex, age, ethnic status, admissions and final enrollment status, and college majors); (2) performance in the community college measured in terms of persistence, credits earned, and grade point average (GPA); and (3) performance at the senior institution measured by advanced standing credit, GPA, persistence and graduation rates, and major. Findings indicate that the overall, gross transfer rate was less than 15%. Of the transfers, 58% were men, 73% were under the age of 20 when first enrolled, at least 63% were not from an ethnic minority group, and most came from the more traditional persisting groups of community college students. While 53% of the transfers had GPA's of 3.0 or better before transfer, about 40% of the State University transfers maintained equivalent GPA's. The California community colleges seem to have become bifurcated institutions: traditional two-year colleges with programs leading to degrees for transfer, and postsecondary institutions for older, part-time students with different objectives. (RC)

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CALIFORNIA COMMUNITY COLLEGE STUDENTS WHO TRANSFER

A Continuation of Through the Open Door:
A Study of Patterns of Enrollment and Performance
in California's Community Colleges

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California Postsecondary Education Commission

May 14, 1979

Agenda Title: California Community Colleges Students Who Transfer:
A Continuation of Through the Open Door: A Study
of Patterns of Enrollment and Performance in
California's Community Colleges

Information Item

Summary:

Staff began a major longitudinal study of Community College students in 1972 at the request of the Legislature, the findings of which were reported in 1976 to the Commission, the Legislature, and the Board of Governors of the Community Colleges. The analysis involved a sample of about 35,000 students, enrolled for credit in thirty-two Community Colleges, who were followed for three-and-one-half years. Near the end of the study, the University of California and the California State University and Colleges offered to search their computerized records for students whose Social Security numbers matched those in the Community College sample, and to provide enrollment and performance data for those who transferred. The follow-up study of transfer students was continued through Spring 1977 for the State University and 1978 for the University.

The analysis of enrollment and performance after transfer was seriously limited by problems inherent in the computerized student enrollment files, primarily incomplete information. However, the findings describe quite well the characteristics of Community College students who transferred in the mid-1970's, compared with the large majority who did not. While the data appear to be old, it is important to realize that longitudinal studies of college students must extend over a period of at least six academic years in order to give students enough time to graduate.

I. BACKGROUND FOR THE STUDY

In 1972, the Coordinating Council for Higher Education was directed by the Legislature to conduct a study of ". . . the extent to which the California Community College system is fulfilling its purposes and achieving its objectives." The introductory section of the statute stated in part:

The Legislature hereby finds that California has one of the most mature and far-reaching systems of community colleges in the nation; that the rapid growth of that system necessitates a review of the goals and programs of the California Community College system so that it may assist the state more effectively in serving the educational needs of its people; that the need for a major study of Community College programs is long overdue; . . .

A study plan was developed by Council staff which acknowledged that the Community Colleges were enrolling (a) an increasing proportion of young people who would have enrolled in four-year institutions before the 1960 Master Plan For Higher Education in California, and (b) large numbers of students whose economic and ethnic backgrounds did not include a tradition of college attendance. Staff also pointed out that no major studies of student flow and persistence had been performed on a statewide basis since the Community Colleges had assumed the major responsibility for providing access to postsecondary education for a majority of Californians.

A representative sample of thirty-two California Community Colleges was selected for the study, in which a total sample of about 35,000 students enrolled in courses for credit was drawn for follow-up activities, which were completed late in 1975. The sample was drawn from the pool of students in each institution who were enrolled for credit on the particular campus for the first time in Fall 1972 (including transfer students who may have been enrolled elsewhere before Fall 1972), and who were still enrolled during the first census week (the fourth week of the semester). With one exception, no special data collection was undertaken. Instead, the student information provided by the colleges was already in their data base or other records systems. Colleges were requested to provide data on both personal characteristics and performance, including courses attempted and completed, grades, and persistence.

The 35,000-student sample was about 10 percent of the pool of students in the thirty-two colleges who met the specifications for the sample, or about 3 percent of the total Community College enrollment in credit courses in the early 1970s. A 10 percent sample was drawn for each college. Exceptions were made for small colleges, which were asked to draw samples of 500 students (or all new

students, if less than 500), and very large colleges, which were asked to provide samples of 2,000 students. Thirty-two colleges were judged to be an adequate sample of the ninety-six in existence in 1972, and the maximum number that project staff could work with in a way that would insure some understanding of local policies, programs, and priorities. Criteria used in selecting the sample of colleges included size of enrollment, fulltime enrollment as a percentage of total enrollment, percentage of ethnic/racial minorities, estimated percentage of enrollment with family incomes under \$5,000, percentage enrollment by sex, age of the college, and geography (urban/suburban/rural, and location in the State in relation to area planning regions).

Information about the students was gathered and updated over a three-year period beginning with the Fall 1972 term, with a final check on enrollment made for the Fall 1975 term. The student data on characteristics are limited in at least two ways. First, information about the students' objectives appeared too unreliable to warrant analysis--for example, intent to work toward degree, transfer, or other type of objective; and student-declared major. Information was judged to be unreliable when the pattern of courses in which a student enrolled over a period of time was inappropriate to the declared objective or major. The scope of the information about student characteristics was also limited--for example, no data were available from the high school record for establishing eligibility for freshman admission to the University or the State University.

The Transfer Study

Near the end of the follow-up study of the Community College students (referred to henceforth as the Open Door study), the State University agreed to enter the Community College students' Social Security numbers into its computer system in an attempt to identify students who had transferred to the State University and to produce performance data for such students. The University agreed to undertake the same kind of matching, although problems were anticipated because of differences among the University campuses in the availability of computerized student data.

Social Security numbers were available for most of the Open Door sample of students in twenty-six of the thirty-two Community Colleges in the follow-up study. Appendix A contains a list of these colleges.

Two of the colleges that were unable to provide Social Security numbers were among those with the largest numbers of transfer students to the University and the State University. These were large, urban institutions, one of which had a high percentage of

students from racial/ethnic minority groups. Therefore, the rates of transfer which were obtained for the sample of twenty-six colleges are probably lower than those that would have been obtained for the Open Door sample of thirty-two Community Colleges. Furthermore, matches were obtained for some Community College students who had been dropped from the Open Door sample because they had failed to enroll, dropped out before the first census week, or had been enrolled before Fall 1972 at the colleges, and thus did not meet the criteria for inclusion in the sample. The transfer group used for the basic analysis was thus 799 for the University and 2,870 for the State University.

It is estimated that about 15 percent of the students in the transfer groups would have been admitted to the University or the State University as first-time freshmen, rather than advanced-standing students, because of the small number of credits they had earned in the Community Colleges. Some had been high school students enrolled for college credit; others had been at the Community Colleges for only one term before enrolling in the four-year institutions. All were included in the analysis, in order to show the diversity of the students served by the Community Colleges.

The data provided by the University and the State University are limited in several ways. No attempt was made to obtain transcripts of the students' academic record because of the cost involved. Instead, persistence and performance data were aggregated over the varying numbers of terms for which the students were enrolled. The search for transfer students from the Open Door sample began with the Fall 1973 term and continued through Spring 1977 for the State University and 1978 for the University, with students enrolling and leaving at varying times during this period. In the case of the University, however, only the Berkeley and Santa Barbara campuses were able to provide usable data for the five-year period. The computer search for students at the other University campuses produced no record of enrollments beyond the Spring 1975 term, and very incomplete performance data for the terms in which students were enrolled. Therefore, analyses involving persistence and performance at the University have been omitted for the University.

Finally, it was not possible to determine with a high degree of confidence whether the transfer students had obtained the baccalaureate degree by the end of the study. Instead, an estimate of degrees awarded had to be made on the basis of total credits and grade points students had earned by the end of the study.

Selected Findings From the Open Door Study

Enrollment increases in the Community Colleges brought about fundamental changes in the composition of the student body, with a concomitant change in the emphasis placed on the various functions performed by the colleges. Between 1969 and 1974, growth in the enrollment of part-time students in credit courses was three times greater than that for full-time students, and total enrollment in both credit and noncredit courses grew 57 percent during that period. In 1974, part-time students comprised about two-thirds of those enrolled for credit, and 47 percent of those enrolled exclusively in late afternoon and evening classes.

Thirty percent of the students in the Open Door study had attended another college or university before enrolling in one of the Community Colleges in the sample. Nearly one-half of the transfers into the Community Colleges had been enrolled at another Community College, about one-fourth at an out-of-state institution, and the remainder at a four-year institution in California or in another country. One-half of the students in the Open Door sample were 21 years of age or less when they enrolled in the Fall 1972 term; about 15 percent of them were at least 35 years of age. While an analysis of the prior postsecondary educational attainment of the Open Door sample was not possible, a scanning of the student records showed that some students enrolled for credit held baccalaureate and advanced degrees.

Like other institutions of higher education, the Community Colleges had adopted reforms in grading practices which reduced the number of penalty grades awarded (F and WF). An analysis of student performance during the Fall 1972 term showed that the students earned only 64 units of credit per 100 units attempted. However, students who persisted beyond the first term earned 82 units of credit per 100 units attempted. Differences among the colleges in grading practices were found that had implications for transfer policies, particularly in the use of penalty grades and adherence to announced dates for withdrawing from courses without penalty.

Finally, the analysis of enrollment patterns over the three-and-one-half year period showed that 54 percent of the students in the sample had been enrolled for only one term, or irregularly, while 46 percent had persisted for at least two consecutive terms. Only 8 percent received the associate degree during the period of the study, and only 6 percent were still enrolled, without the degree, when the study ended. The "persisters" were generally younger and more likely to be enrolled fulltime. Of the students enrolled fulltime at the beginning of the study more than two-thirds persisted at least two terms, and 17 percent received an associate degree during the study.

The analysis of the patterns of enrollment and performance of the Open Door sample provided clear evidence of the diversity of the students enrolling for credit in the Community Colleges. Somewhat less than half appeared to have some potential for transfer to a four-year institution--the persisters, particularly those who were enrolled fulltime in a variety of general education, liberal arts, and mixed programs combining general and occupational education. The potential transfer group also included a small percentage of "non-persisting" students who enrolled for a short time in order to earn credit in one or two courses before enrolling in the University or the State University--for example, students who had not yet graduated from high school.

Findings From Other Analyses

A summary of the findings from the University's recently resumed analysis of the flow and performance of Community College transfer students is contained in Appendix B. Information about grade-point averages earned before and after transfer is summarized separately for students who would have been eligible for freshman admission on the basis of their high school records, and those who established their eligibility in the Community Colleges.

A State University study published in June 1976, Those Who Stay: Student Continuance in the California State University and Colleges, is summarized for transfer students in Appendix C. The State University has not yet been able to undertake the annual, statewide reporting of the performance of Community College transfer students that the University resumed in 1979.

II. STUDENT CHARACTERISTICS

The personal characteristics of Community College students who transferred to the University of California and the California State University and Colleges are of interest to persons concerned about student affirmative action, particularly with regard to sex, age, and racial/ethnic identification. Comparisons have been made between the characteristics of the total sample in the Open Door study and those of the students in the sample who transferred during the period studied.

Sex

Percentages of men and women in the Open Door sample who transferred to the University and the State University are shown in Table 1, together with the percentages in the total sample. The percentages of women who transferred are significantly lower than those of men in both the University and the State University, and lower than the percentage of women in the total Community College sample. A comparison with the total undergraduate enrollment in Fall 1977 tends to support the conclusion that women are underrepresented in the Community College transfer group, insofar as women comprised 47 percent of the University and 48 percent of the State University undergraduate enrollment, but only 43 and 42 percent of the transfer groups, respectively. 1/

TABLE 1

Sex of Community College Transfer
Students, Compared with the Total
Community College Sample
(In Percents)

Sex	Transfers to			Total Sample
	UC	CSUC	Total	
Male	57%	58%	58%	53%
Female	43	42	42	47
Total Number	799	2,870	3,669	34,245

Relatively little information is available to explain sex differences in transfer rates. The Open Door study showed that women in the Community Colleges tended to persist and graduate at a somewhat lower rate than men. However, Community College students who would have been eligible for admission to the University or the State University as freshmen may transfer at any time, if they have earned satisfactory grades in college. Eligibility to transfer does not appear to be a factor in the lower transfer rate for women, since larger percentages of women than men were found to be eligible for freshman admission to the University and the State University on the basis of their high school records, 2/ and their Community College grades were comparable. Possible explanations for differences in the transfer rates for men and women include: (1) lower educational aspirations on the part of women; (2) differences in programs pursued in the Community Colleges, that is, transfer versus occupational programs; and (3) reluctance of women to leave their home communities in order to transfer to a four-year institution.

Age At Time Of Community College Enrollment

Percentages of transfer students in various age categories when they entered the Community Colleges are shown in Table 2, together with the age distribution of the total sample in the Open Door study. As might be expected, students transferring from Community Colleges to the University and the State University tended to be younger than students in the total sample. Furthermore, transfer students to the University were somewhat younger when they entered the Community College than transfers to the State University. Seventy-three and sixty percent of the University and State University transfer students, respectively, were under the age of 20 when they entered the Community College, compared with only forty-seven percent of the total Community College sample. While older students appear to be underrepresented in the transfer groups, they were more likely than younger students to have had limited objectives which were satisfied during part-time, short-term enrollment in the Community Colleges. The University's policy of expecting students to enroll on a full-time basis may also have discouraged older students with fulltime employment or family responsibilities, or both, from transferring.

About one-fourth of the transfer students who were age 17 or under when they entered the Community College had not yet graduated from high school. Some continued their enrollment in the Community College after graduation, while others entered the University or State University as freshmen, with varying amounts of advanced standing credit.

TABLE 2

Age of Transfer Students When They Entered
Community College, Compared With The
Total Community College Sample
(In Percents)

Age Category	Transfers to			Total Sample
	UC	CSUC	Total	
17 and under	12%	5%	6%	3%
18 - 19	61	55	56	44
20 - 24	17	21	20	21
25 - 29	5	10	9	12
30 - 39	4	6	6	20*
40 - 49	1	2	2	-
50 - 59	<1	1	1	-
60 and over	0	<1	<1	-
Total Number	799	2,870	3,669	34,245

*Thirty years or older when entering the
Community College.

Racial/Ethnic Composition

Information about the racial/ethnic composition of the transfer student groups and the Open Door study sample was incomplete. It was unavailable for 19 percent of the transfer students and for six colleges in the Open Door study. Results of the analysis of the available data are displayed in Table 3 for men and women separately, together with data for all fulltime lower division students in the Community Colleges in Fall 1977. Extreme caution is urged in interpreting the percentages in the table because of the large rate of non-response and of differences among the segments in this rate. It is also important to remember that change in the enrollment rates of

TABLE 3

Ethnicity of Community College Transfer
Students, by Sex, Compared With The
Total Community College Sample
(In Percents)

Racial/ Ethnic Groups	Sex	Transfers to			Full-time Community College Students
		UC	CSUC	Total	
Black	M	6%	5%	5%	10%
	W	9	7	8	11
	T	7	6	6	10
Chicano	M	10	6	6	10
	W	4	5	5	10
	T	7	5	6	10
Asian	M	7	4	5	5
	W	4	4	4	5
	T	6	4	4	5
American Indian	M	<1	1	1	1
	W	1	1	1	1
	T	1	1	1	1
Other Nonwhite	M	3	<1	1	-
	W	4	1	1	-
	T	3	<1	1	-
White	M	65	62	64	56
	W	69	59	61	56
	T	67	61	63	56
No Information	M	9	21	18	18
	W	9	23	20	17
	T	9	22	19	18

minorities occurred between 1972, when the transfer students first enrolled in the sample of Community Colleges and Fall 1977, which was selected as the term for which the most complete data were available. Ethnic data for part-time and other-than-lower division students were excluded from the comparison because of their low response rate, and the lower probability that such students would transfer to the University or the State University.

About two-thirds of the students who transferred to the University identified themselves as white, while nearly one-fourth indicated membership in one of the racial/ethnic minority groups. Nine percent declined to declare themselves. Blacks, Chicanos, and Asians were almost equally represented in the University transfer group, with each having about 7 percent of the total. However, the percentages of men and women differed somewhat among the three groups. The percentage of Black women exceeded that of men in the University transfer group (9 and 6 percent, respectively), but the percentages of Chicanas and Asian women were both smaller than the percentages of men transfer students (4 and 10 percent for the Chicanos; 4 and 7 percent for the Asians). American Indians accounted for only 1 percent of the transfer group, while other, nonwhite students accounted for about 3 percent.

Twenty-two percent of the State University transfer students provided no racial/ethnic information. The comparatively low rate of response produced lower percentages in the various racial/ethnic categories than those obtained for the University transfer group. However, given the unreliability of racial/ethnic data, generally, the conclusion appears warranted that the University and State University probably do not differ significantly in the enrollment of racial/ethnic minorities who transfer from Community Colleges. In both groups, the percentage of Black women in the transfer group was larger than that of men. Percentages of women in the other minority groups were quite similar to those of men, although the total number of women who transferred to that system was smaller than the number of men.

A comparison of the transfer group with the Fall 1977 students in Community Colleges leads to the conclusion that Black and Chicano students are probably underrepresented in the transfer groups, but that Asian and American Indian students probably are not. If part-time Community College students had been included in the comparison, the degree of underrepresentation would have appeared larger and all racial/ethnic minority students would be regarded as underrepresented in the transfer groups.

Sex differences in the racial/ethnic composition of the combined transfer groups are shown in Table 4 in terms of the percentages of men and women in each group. If there were no differences among the

TABLE 4

Percentages of Men and Women in Each
Racial/Ethnic Group

(University and State University Combined)

Racial/Ethnic Group	Men		Women	
	N	%	N	%
Black	106	48%	113	52%
Chicano	127	64	72	36
Asian	91	60	60	40
American Indian	25	62	15	38
Other Non-White	18	50	18	50
White	1246	58	889	42
No Information	346	55	286	45
*Total	1985	58%	1464	42%

* Total includes "all other responses."

groups with respect to the representation of men and women, then each entry for the men would have been 58 percent, and women, 42 percent, since they are represented in the total transfer groups with these percents. Entries in Table 4 show that the percentage of Black women in the transfer groups was significantly larger than in the total group, while the percentage of Chicano women was significantly smaller. The percentage of white women was the same as that obtained for the total transfer group. This was expected since white students constituted about two-thirds of the total group.

Enrollment Characteristics of the Community College Students

Admissions Status

One-third of the transfer groups had attended another collegiate institution before enrolling in the sample of Community Colleges in the Open Door study in Fall 1972. The other two-thirds of the

transfer students were first-time freshmen (or high school students enrolling in the Community College for credit). The type of institution attended by the largest number of "prior transfers" was another Community College, often in the same district or region, followed by out-of-state institutions, the California State University and Colleges, the University of California, and independent California colleges and universities. The composition of the Open Door sample with respect to the proportion of first-time freshmen and transfer students enrolling in Fall 1972 was not significantly different from that of the groups transferring to the University and the State University.

Final Enrollment Status

The enrollment status of the transfer groups at the end of the three-and-one-half year Community College follow-up study is shown in Table 5, together with the enrollment status of the total Open Door sample. It is clear from the data that most transfer students had persisted at least two consecutive terms in the Community Colleges, including nearly one-third who had earned an associate degree. The transfer groups included very small percentages of students who exhibited irregular attendance patterns in the Community Colleges--that is, who enrolled for more than one term but with no two terms consecutive. Of the relatively few transfer students who had been enrolled for only one term in the Community Colleges, some were still in high school while enrolled, others had withdrawn without earning credit, and some had transferred to the Community Colleges for only one term.

The distribution of the total Community College sample among the "Enrollment Status" categories in Table 5 differs considerably from that found for the transfer groups. Only 8 percent of the total sample had obtained an associate degree by the end of the third year after entrance, compared with 32 percent of the transfer groups. At the other extreme, 54 percent of the total sample had been enrolled for only one term or irregularly during the three-year, follow-up study, compared with only 20 percent of the transfer groups.

Some differences between the University and State University transfer groups may be seen in Table 5. Transfers to the University were somewhat less likely than State University transfers to have received an associate degree, but more likely to have completed at least two consecutive terms without obtaining an associate degree. The difference appears to be a matter of completing (or neglecting to complete) associate degree requirements before transfer, rather than the number of terms completed in the Community College. The transfer policy of the State University allows Community Colleges to certify that general education requirements have been completed and that the

courses are at the baccalaureate level. This policy is related to differences in mission and functions between the two systems, and may account for the differences between the systems in the percentage of transfer students with an associate degree.

TABLE 5
Enrollment Status of the Transfer Groups
Three Years After Entering the Community
Colleges, Compared with the Total
Community College Sample
(In Percents)

Enrollment Status*	Transfers to			Total Sample
	UC	CSUC	Total	
Received an associate degree	26%	33%	32%	8%
Still enrolled at the college	9	6	7	6
Persisted at least two consecutive terms but no degree awarded	53	39	41	32
Irregular enrollment for two or more terms	4	8	7	19
Enrolled for only one term during study	8	14	13	35
Total	100	100	100	100%

* Students have been counted in only one of the five categories in the table. Those who received an associate degree were not counted elsewhere. Of the remaining students, those still enrolled at the end of the Community College part of the follow-up study were not counted elsewhere. Similarly, students counted as "persisted for at least two terms" did not receive degrees and were not enrolled at the end of the study.

In Table 6, the information in Table 5 was recomputed so that entries represent the percentages of the total sample in each category of "Enrollment Status" who transferred to the University and the State University. The most surprising finding from this analysis was that as many as 52 percent of the students who earned an associate degree transferred to the University or the State University during the study. Twenty-two percent of all Community College students who

TABLE 6

Percentages of the Total Open Door who
Transferred to the University and the
State University, as a Function of
their Enrollment Status Three
Years After Entering the
Community Colleges
(In Percents)

Final Enrollment Status in CCC *	Transfers to			Percent of Total Sample
	UC	CSUC	Total	
Received an asso- ciate degree	7%	45%	52%	8%
Still enrolled at the college	3	11	14	6
Persisted at least two con- secutive terms but no degree	4	13	17	32
Irregular enroll- ment for two or more terms	<1	4	5	19
Enrolled for only one term during study	<1	4	5	35
Total	2	11	13	100 %

* See footnote at the bottom of Table 5.

persisted for two or more consecutive terms (including the graduates) transferred. The groups which persisted for at least two terms constituted somewhat less than half of the Open Door sample, only 8 percent of which received an associate degree. On the other hand, only 5 percent of the Community College students who had enrolled for only one term, or irregularly, transferred to the University or the State University during the study. These two groups, which produced so few transfer students, constituted 54 percent of the Open Door sample.

A comparison of men and women showed that the percentage of women with associate degrees who transferred during the study was significantly smaller than the percentage of men, although the percentage awarded the associate degree was the same for both sexes. More specifically, 8 percent of the men and 8 percent of the women in the Open Door study received the associate degree during the three-year, follow-up study. However, 58 percent of the men transferred after receiving the degree, compared with only 45 percent of the women. Sex differences in transfer rates were extremely small for the other four enrollment categories in Tables 5 and 6, although the percentages for women tended to be smaller.

Overall, 13 percent of Community College students in the Open Door study had transferred to the University or the State University by the Spring 1978 term. Eighty-three percent of the transfer students enrolled in the State University and 17 percent in the University. It seems likely that the percentage of "eligible" students who transferred would be much higher than 13--that is, Community College students who qualified for admission as transfer students by virtue of having completed two years of college transfer work with satisfactory grades, or having been eligible for freshman admission on the basis of their high school record and aptitude test scores. Most Community College students would attain eligibility for admission to the University and the State University as transfer students if they completed two years in a transfer program with satisfactory grades (C+ in the case of the University and C for the State University), but only about half the students appear to do so.

Looked at another way, 53 percent of the transfer students completed at least four semesters or six quarters in the Community Colleges before transferring. An additional one-third of the transfers completed at least one year but less than two before transferring, while about 15 percent transferred after one semester, or one or two quarters, in the Community Colleges. The findings concerning rates of persistence and transfer support the contention of the Community Colleges that they provide courses and programs for a very diverse student body whose educational objectives and aspirations vary widely.

The fields in which the associate degree was earned by students who transferred to the State University are displayed in Table 7. These students comprised one-third of the State University transfer group. Forty percent of the associate degree recipients had pursued a general studies program in the Community Colleges that included some mixture of liberal arts and occupationally oriented programs. These students were not included in the tabulation of majors since their records gave no clear indication of a major. Of the remainder, 48 percent earned degrees in transfer programs in Liberal Arts or General Education, 36 percent in an occupationally oriented major, and 16 percent in a specific major in Letters or Science.

TABLE 7

Majors in Which Associate Degrees of Transfer Students to the State University Were Awarded

Major for Associate Degree	Percent with Major
Liberal Arts, General Education	48%
Specific Letters or Science major	16
Occupationally oriented major	36
Mixed program, not categorized	40

Thirty-five percent of the graduates with occupationally oriented majors were in the field of Business, with an additional 7 percent in Secretarial and Office Occupations majors. The next largest group (18%) included majors in Education and related fields--for example, Early Childhood Education and Nursery School Education--followed by majors in Fire and Police Science (12%), Health Professions (11%), and Agriculture and Natural Resources (10%). Electronics, Surveying, and Drafting majors were each pursued by less than 10 percent of the transfer students with associate degrees. Some of these majors were, of course, designed for transfer students. Others were planned for students who would, in most cases, seek employment after graduating from the Community College.

Thirty-nine percent of the students with specific Letters and Science majors earned degrees in Mathematics, Engineering, or the Natural Sciences. The Social Sciences accounted for 31 percent of this group, followed by Fine and Applied Arts, and Psychology.

III. PERFORMANCE IN THE COMMUNITY COLLEGES

Enrollment Patterns

About 80 percent of the transfer students had been enrolled in the Community Colleges for at least two consecutive terms, while 13 percent had been enrolled for only one term and 7 percent irregularly during the follow-up study (see Table 5). The enrollment groups differed with respect to the nature of their performance in the Community Colleges. Transfer students who had been enrolled only one term in the Community Colleges received letter grades (A,B,C,D, and F) and indicators of noncompletion of courses (W,WF,NCR, and I) in about equal proportions. On the other hand, about 85 percent of the "persisting" students received letter grades in all or most of their Community College courses, while 15 percent received some mixture of letter grades and symbols for non-completion. Students who attended irregularly often had one term in the Community College with no grades earned and a later term with mostly letter grades.

Most of the one-term and irregularly enrolled students would have been admitted to the University or the State University on a basis other than their Community College record. All were reported by the Community Colleges to have been enrolled during the first census week, but almost 10 percent earned no credit. The two most likely bases for admitting the "non-performers" from the Community Colleges are (1) eligibility for freshman admission on the basis of their high school record, and (2) eligibility for admission with advanced standing on the basis of substantial work at another institution, that is, before enrolling in the Community College of record.

A finding of the Open Door study was that persistence was positively correlated with fulltime enrollment; that is, students who enrolled for at least twelve units when they entered the Community College were more likely to persist through at least two terms than those enrolled for only a few units. A majority of the transfer group was enrolled fulltime during the first term in the Community College (and subsequently, in most cases). The fulltime Community College students constituted nearly two-thirds of the University and one-half of the State University transfer groups. A large majority of the students in both groups had been first-time freshmen in the Community Colleges in Fall 1972, rather than transfers from other collegiate institutions.

Students who had enrolled for two or three courses (four to eleven units) in their first term in the Community College constituted one-fourth of the University and one-third of the State University transfer groups. Those who had had only one course in their first term (one to three units) represented 10 percent of the University and 17 percent of the State University transfer groups. As might be expected, the first-time freshmen in the Community Colleges were much more likely to be enrolled fulltime than the transfers in the Community Colleges in Fall 1972.

Women who transferred to the State University were quite similar to the men with respect to their credit load in the Community Colleges. However, women who transferred to the University were somewhat more likely than the men to have been part-time students in the Community Colleges, and to have been a transfer student into a Community College.

The Community College enrollment patterns of the transfer groups are displayed in still a different manner in Table 8. Percentages of transfer students attending the Community Colleges for different numbers of semesters or quarters are shown separately for the University and the State University. The largest percentage transferred after two years in a Community College--33 percent of the University and 29 percent of the State University transfers. The next largest percentage transferred at the end of one year--25 percent of the University and 22 percent of the State University transfers. Looked at another way, 54 percent of the transfer students had enrolled for at least two years in the Community Colleges, and only 13 percent transferred after less than one year.

TABLE 8

Number of Terms Enrolled in the
Community Colleges Before
Transfer
(In Percents)

Number of Semesters or Quarters	Transfers to		Total
	UC	CSUC	
One semester or quarter	8%	14%	13%
Two semesters, two or three quarters	25	22	22
Three semesters or four quar- ters	12	11	11
Four semesters, five or six quarters	33	29	30
Five semesters or seven quar- ters	11	14	14
More than five semesters or seven quarters	11	10	10

The number of academic terms is, of course, only a rough indicator of credit earned since students enroll for and complete varying amounts of units of credit. Furthermore, some students are able to accelerate by means of summer session enrollments--that is, complete the equivalent of two years in three semesters and two summer sessions. Finally, the information displayed in Table 8 does not take into account any terms in which the transfer students may have enrolled in other institutions--that is, before enrolling in the Community College in 1972 or between the Community College and the University or the State University. Since about one-third of the transfers from the Community Colleges had had some prior postsecondary enrollments, the number of terms attended, as shown in Table 8, is probably an underestimate of the total terms attended before transfer.

Grade-Point Averages

Community College grade-point averages earned by the students transferring to the University and the State University are displayed in Table 9 for men and women separately. One-half of the

TABLE 9

Community Colleges Grade-Point Averages
Earned by Students Who Transferred
to the University and the State
University, by Sex
(In Percents)

Community College Grade-Point Average*	Transfers to						
	UC		CSUC		Total		
	Male	Female	Male	Female	UC	CSUC	Total
3.5 - 4.0	21%	35%	15%	25%	27%	19%	21%
3.0 - 3.4	39	33	29	32	36	31	32
2.5 - 2.9	27	22	31	24	25	28	27
2.0 - 2.4	12	9	21	16	11	19	17
below 2.0	1	<1	4	3	1	3	3

* 2.0 = C, 3.0 = B, and 4.0 = A

State University and almost two-thirds of the University transfers had Community College grade-point averages of B (3.0) or better, while only 12 percent of the University and 22 percent of the State University students had transfer averages below C+ (2.5).

The grade-point averages of the students who transferred to the University are somewhat higher than those of the State University transfers. The University group contained a significantly higher percentage of students with transfer averages of B (3.0) or above, and a lower percentage with transfer averages below C+ (2.5).

The percentage of women in both transfer groups with grade-point averages of B+ or better (3.5 to 4.0) was significantly higher than the percentage of men. Averages for women in the University transfer group were higher than those for women in the State University group.

The group of about 100 students who were identified as transfers with Community College grade-point averages below C is very diverse. The University and State University computerized records show no Community College grade-point average for about one-third of this group, although averages below C were obtained from the Community College records. About one-fourth of this group appeared to have been admitted to advanced standing with averages below C; two-thirds had earned averages of C- in the Community College (1.8 or 1.9), and the remainder, low C. Nearly 30 percent had transferred to one of the Community Colleges in the Open Door study with grade-point averages above C which, when combined with a limited number of unsatisfactory Community College grades, produced an overall transfer average of at least C. The remainder of the students received a mixture of letter grades and indicators of withdrawal or incomplete coursework that resulted in a poor overall Community College record.

About one-third of the students with low transfer grade-point averages were from an ethnic minority group. Two-thirds were identified as white or unknown. Three-fourths of the students with poor averages were under 20 years of age when they first enrolled in the Community Colleges; only 6 percent were 35 years or older.

IV. AFTER TRANSFER, WHAT?

The first objective of articulation policies and programs involving the three public segments is to facilitate the transfer of capable, motivated students. Agreements between the segments are of relatively little worth if few students take advantage of them. Section III of the report provided information about the flow of students from the Open Door sample into the University and State University, in terms of their patterns of enrollment and performance in the Community Colleges. No estimate could be made of the number of potential transfer students who did not do so, although it is believed to be large even when only Community College graduates and other persisters are considered.

Beyond the simple act of gaining admission after attending a Community College, transfer-student success may be evaluated in terms of (a) amount of credit accepted by the "receiving" institutions and applied toward the satisfaction of requirements for the baccalaureate degree; (b) grade-point average earned after transfer, insofar as persistence and graduation are dependent upon satisfactory grades; (c) grade-point differential, that is, the plus-or-minus difference between the Community College and the University or State University grade-point averages; (d) continuing enrollment (persistence); and (e) the granting of the degree.

These five measures are somewhat hierarchical and interrelated, in that the degree cannot be awarded in the absence of persistence with satisfactory grades. Furthermore, transfer students who have large, negative grade-point differentials, or who lose a considerable amount of credit when their records are evaluated, or both, are not likely to persist for many terms and may advise students from their Community Colleges not to transfer.

Awarding of Advanced Standing Credit

The amount of transfer credit accepted, together with equivalent quarters and semesters, is displayed in Table 10. The percentages are based on the records of Community College students who transferred to all nineteen State University campuses and to the Berkeley and Santa Barbara campuses of the University. All University and some State University campuses are organized on a quarter-term calendar, while most Community Colleges and some State University campuses are organized on a semester-term calendar. In an attempt to minimize distortion resulting from the conversion from semester to quarter units, or vice versa, University data are expressed as quarter units, and State University data as semester

units in Table 10. One academic year usually consists of two semesters or three quarters, in which about thirty semester or forty-five quarter units are earned by fulltime undergraduate students.

The University and the State University have an agreement with the Community Colleges under which transfer students may be awarded a maximum of 70 semester or 105 quarter units of lower division credit, which is slightly more than the equivalent of two years of coursework. Under some circumstances Community College students may be awarded additional lower division credit when (or after) they transfer, if they have enrolled in some combination of two-and-four-year institutions but have not exceeded the maximum allowable Community College transfer credit.

TABLE 10

Amount of Credit Accepted for
Transfer by the University
and the State University

Community College Transfers to					
UC			CSUC		
Quarter Units Accepted	Equivalent Quarters	Percent of Transfers	Semester Units Accepted	Equivalent Semesters	Percent of Transfers
>105	>6	5	>7	>4	10
90 - 105	6	22	60 - 70	4	47
75 - 89	5	26	-	-	-
-	-	-	45 - 59	3	25
60 - 74	4	9	-	-	-
45 - 59	3	12	30 - 44	2	10
30 - 44	2	12	-	-	-
-	-	-	15 - 29	1	4
15 - 29	1	10	-	-	-
<15	<1	4	<15	<1	4
Total	-	100	-	-	100

Table 10 shows that 57 percent of the State University and 27 percent of the University students were awarded the equivalent of at least two years of advanced standing credit when they transferred from the Community Colleges. The considerably higher percentage of State University transfers awarded credit for two years of prior work is attributable to the greater diversity of the enrollment patterns of students in that segment, and greater flexibility in awarding transfer credit. In other words, State University students are more likely than those in the University to have enrolled in several institutions before completing baccalaureate degree requirements, in some mixture of part- and full-time status. Some of the transfer students to the State University who were enrolled in a Community College in Fall 1972, in the Open Door sample, were awarded substantial amounts of transfer credit which they had earned in various collegiate institutions.

Only 8 percent of the transfers to the State University in the Open Door sample were awarded less than a full year of advanced standing, compared with 26 percent of the transfers to the University. An additional 47 percent of the University and 35 percent of the State University transfer students were awarded credit equivalent to at least one year but less than two years of coursework. Most transfer students with less than two years of transferable coursework would have had to meet the requirements for freshman admission to the University or the State University (or, in the case of the University, to have made up subject deficiencies they incurred in high school), unless they were admitted as exceptions to the transfer admission requirements.

Because of insufficient information about the students' records, no analysis was made of credit "lost" in transfer. Any such analysis is very complex since it must consider the degree requirements that transfer courses are certified as meeting, as well as the general certification that courses are at the baccalaureate level (in a sense, "higher" as opposed to "secondary" or "postsecondary" education). However, a cursory examination of amounts of Community College courses completed and advanced standing credit awarded showed no large problems of credit not granted for appropriate courses taken in the Community Colleges.

Grade-Point Averages Earned

Both first-term and cumulative grade-point averages were available for Community College transfer students in the State University. Distributions for men and women, and the combined group, are displayed in Table 11. No information was available for 18 percent of the students, most of whom enrolled for only one term and thus had no State University performance data recorded for them in the

computerized student data base. About 40 percent of the Community College transfer students earned first-term and cumulative State University grade-point averages of B or better, with the exception of the group for whom no grades were recorded. Only 17 percent had first-term averages below C, and 15 percent had cumulative averages below C. The remaining 44 percent earned averages between B and C, about half of which were 2.5 and above.

The percentages of women earning averages of B and above were higher than those obtained for men in the transfer group, while the percentages of women with averages below C were smaller. Thus women, who were somewhat underrepresented in the transfer group, earned higher grades than men, both in the first term after transfer and overall. Some of the differences may be attributed to different choices of major by men and women.

TABLE 11

First-Term and Cumulative Grade-Point
Averages Earned by Transfer Students
to the State University
(In Percents)

Grade-Point Average*	Men		Women		Total	
	First Term	Cumu- lative	First Term	Cumu- lative	First Term	Cumu- lative
3.50 - 4.00	14%	11%	21%	21%	17%	15%
3.00 - 3.49	23	23	26	26	24	24
2.50 - 2.99	19	24	22	26	21	24
2.00 - 2.49	24	26	18	16	21	22
1.50 - 1.99	10	9	7	6	8	8
1.00 - 1.49	5	3	4	2	5	3
below 1.00	5	4	2	3	4	4
unknown	17	17	19	19	18	18

* 4.0 = A, 3.0 = B, 2.0 = C, and 1.0 = D

Students with grade-point averages below C may be placed on academic probation and, if poor performance continues, be subject to dismissal. Grades earned in the Community Colleges are not included in the computation which leads to a determination of academic standing. Since many transfer students undergo some stress resulting in a drop in grades during their first term after transfer, it is not surprising to find that 17 percent of the students had averages below C for the first term. However, the finding that 15 percent of the cumulative averages were below C was unexpected, since many of the students had been enrolled for at least a year without earning grades which would enable them to qualify for a baccalaureate degree.

The State University appeared to have allowed some transfer students to continue to attend while on academic probation for three or more semesters, with little evidence of their raising their grades as they accumulated credits approaching the number required for the baccalaureate degree. While the averages were only slightly below C, they were too low to enable the students to graduate within a reasonable amount of time (if ever).

For University students, information was limited to cumulative grade-point averages for those who had transferred to the Berkeley and Santa Barbara campuses. The distribution is shown in Table 12 (page 27). One-third of the students--somewhat less than for the State University--had University grade-point averages of B and above, while about 12 percent earned averages below C. No grade-point information was available for 5 percent of the students. Since the "unknowns" were excluded from the computation of the percentages, the distributions of averages for the University and the State University may be compared. The transfer students' performance may best be summarized by noting that about two-thirds in both segments earned grade-point averages of 2.5 (midway between B and C) and above, 21 percent earned averages of C and slightly above, and the remainder (less than 15 percent) had cumulative averages that were unsatisfactory at the time data collection ceased.

Differences between the Community Colleges, the University and the State University grade-point averages are summarized in Table 13 (page 28). The Community College is subtracted from the University or State University average to obtain a "differential," which has either a negative value indicating lower grades after transfer, or a positive value for students whose grades improve after transfer. Differentials are displayed in Table 13 on a scale of plus and minus "half grade-points," which tends to magnify gains and losses.

TABLE 12

Cumulative Grade-Point Averages Earned by
Transfer Students to the University at
Berkeley and Santa Barbara
(In Percents)

Grade-Point Average*	Percent with Average (N=346)
3.50 - 4.00	11%
3.00 - 3.49	22
2.50 - 2.99	34
2.00 - 2.49	21
1.50 - 1.99	9
1.00 - 1.49	2
Below 1.0	<1
Unknown	5

* 4.0 = A, 3.0 = B, 2.0 = C, and
1.0 = D

Thirty-six percent of the students who transferred to the State University earned higher grades after transfer, while 51 percent suffered some loss. A small percent (13) experienced no change, that is, less than one-tenth of a grade point. Fifty-six percent of the students with a change in grade-point averages experienced less than a half-point increase or decrease, and only 10 percent (or 6.5 percent of the total group) had a grade-point differential of 1.0 or larger (for example, from B+ to C+, or vice versa).

Women who transferred to the State University were somewhat more likely than men to have no change or an increase in their grade-point averages (over what they earned in the Community Colleges). As was shown in Table 11, women also earned somewhat higher grades than men in the State University.

TABLE 13

Change In Grade-Point Averages From The
Community Colleges to the University
and the State University
(In Percents)

Change in GPA*	Transfers to UC	Transfers to CSUC		
		Men	Women	Total
+2.0 or more		<1%	<1%	<1%
+1.5 to 1.9	<1%	<1	<1	<1
+1.0 to 1.4	1	1	1	1
+0.5 to 0.9	3	11	10	11
+0.1 to 0.4	13	23	22	23
No change	7	10	17	13
-0.1 to 0.4	33	27	26	26
-0.5 to 0.9	25	20	17	18
-1.0 to 1.4	15	6	4	5
-1.5 to 1.9	2	1	2	1
-2.0 or more	1	1	1	1

* A "+" indicates a higher grade-point average after transfer; a "-" indicates a higher grade-point average in the Community College. A change of "+1.0," for example, might represent an increase from a C+ in the Community College to a B+ in the State University.

Grade-point differentials obtained for students who transferred to the University were more likely to be negative than positive, with 76 percent experiencing some loss and only 17 percent, a small gain. However, nearly half the losses and gains were less than a half grade point. Seven percent of the transfer students had no change in grade-point average after transfer. The group most likely to be in academic difficulty was the 18 percent whose averages dropped at least a full grade point.

Persistence and Graduation Rates for State University Transfers

Analysis of student persistence after transfer and graduation is complicated by (a) differences among the students in the terms and years when they transferred to the State University, and (b) the ending of the follow-up study before many students had graduated or dropped out. Since the study began in 1972 and continued through Spring 1977 for the State University, the findings about early cessation of enrollment after transfer are probably more reliable than those for students enrolled for more than two years after transfer.

The status of the transfer students to the State University at the end of the follow-up study is summarized in Table 14. Little is

TABLE 14

Status at the End of the Study of Transfer Students to the State University

Status at End of Study	Percent of Total Group	Percent With GPA of C or Better
Probably graduated	38%	100%
Still enrolled	30	84
Dropped out after two or more terms	17	67
Dropped out during or after one term	15	Unknown
No information after two or more terms enrolled	9	—

known about 9 percent of the sample, for whom enrollment of at least two terms was recorded in the statewide data system but with no indication of credit or grade points earned. This group of transfer students was excluded from the computation of other percentages in the table since their actual enrollment could not be verified. Among the remainder, about 15 percent withdrew during or at the end of one regular term. Another 17 percent dropped out after completing at least two regular terms but without receiving a baccalaureate degree; two-thirds of these left with a cumulative grade-point average of C or better. No information about credit or grade points earned was available for students who did not enroll for a second term.

Thirty percent of the transfer students were still enrolled without the baccalaureate degree at the end of the study, eighty-four percent of whom had cumulative averages of at least C. The percentage of students who qualified for the baccalaureate degree during or at the end of the study was estimated to be 38, taking into account the total amount of credit earned, credit earned at the institution that would award the degree, and cumulative grade-point average after transfer. However, no confirmation of graduation could be obtained from the data available for analysis. Taking into account the progress of the students still enrolled at the end of the study, and the good grades earned by many who dropped out just short of the baccalaureate, an estimate of an eventual graduation rate of two-thirds of the transfers to the State University appears reasonable.

The data were also analyzed in terms of the total number of terms for which the transfer students were enrolled at the State University, without regard to graduation or the total possible number (from time of admission to the end of the study). The analysis showed that about one-third of the students were enrolled at the State University for one year or less; one-third, from one to two years; and about one-third, more than two years. The latter group included some students who continued beyond the baccalaureate degree in credential or master's degree programs, or both. Women were somewhat more likely than men to drop out during or at the end of one year, or to enroll for more than two years. The latter difference may be accounted for in part by the larger percentage of women continuing beyond the baccalaureate for a teaching credential.

Choice of Majors

Majors declared by Community College students who transferred to the State University are shown in Table 15, together with the majors of the students who qualified for the baccalaureate degree. The two distributions differ primarily with respect to the percentage of undeclared or unknown majors, which of course was very small for the graduates. Other shifts from the distribution of "declared" to "graduation" appear to be insignificant.

TABLE 15

Majors Declared by Transfer Students
to the State University
(In Percents)

Declared Major	All Transfers			Graduates
	Men	Women	Total	
Agriculture and Natural Resources	4%	2%	3%	5%
Architecture and Environmental Design	1	<1	1	1
Area Studies	<1	<1	<1	<1
Biological Science	5	3	4	4
Business and Management	20	10	16	17
Communications	3	2	2	4
Computer and Information Science	1	<1	1	1
Education	6	9	7	10
Engineering	5	<1	3	3
Fine and Applied Arts	5	6	5	5
Foreign Languages	1	1	1	1
Health Professions	2	6	4	5
Home Economics	<1	4	2	3
Letters	2	4	3	5
Mathematics	<1	<1	<1	1
Physical Science	2	1	1	2
Psychology	4	5	5	5
Public Affairs and Services	8	5	7	8
Social Sciences	9	8	8	10
Interdisciplinary Studies	2	9	5	8
Undeclared	20	25	22	2

The fields attracting the largest numbers of students were Business and Management (20 percent of the declared majors and 17 percent of the graduates); and the Social Sciences (9 percent of the majors and 10 percent of the graduates). The Education "majors" do not include students seeking a credential to teach since such students must have subject-matter majors. Therefore, the percentage in Education is an underestimate of those planning to enter the teaching profession.

Sex differences in choices of major were not unexpected. The percentage of women with majors in Business and Management and the Sciences was smaller than that of men, but larger in Education, Home Economics, the Health Professions, and Interdisciplinary Studies. For the combined sexes, percentages were relatively small for the various scientific and mathematics-related fields.

V. SUMMARY OF THE FINDINGS

Who Transfers, Where?

Fifty-two percent of the students in the Open Door sample who were awarded an associate degree transferred to either the University or the State University sometime within about a five-year period. More than 20 percent of all the students in the sample who had persisted for at least two consecutive terms were identified by the University and the State University as having transferred. On the other hand, only 5 percent of the Community College students who had enrolled for only one term, or irregularly, were found in the transfer records. Since the latter constitutes more than half of the student body in the Community College, the overall, gross transfer rate was estimated to be less than 15 percent.

Twenty-two percent of the transfer students identified in the matching of Social Security numbers were enrolled at the University, and seventy-eight percent at the State University. Because of problems with the University's computerized data base, information about performance could be analyzed for only the Berkeley and Santa Barbara campuses.

What Are The Transfer Students Like?

Fifty-three percent of the Community College students who transferred were men; forty-seven percent, women. Of those who transferred to the University, 73 percent were under the age of twenty when they first enrolled in the Community Colleges, compared with 60 percent of the State University transfer students. Only 3 percent were 40 years of age, or older.

At least 63 percent of the transfer students were not from a racial/ethnic minority group (19 percent gave no information). Black women and Chicano men appear to be best represented among the transfer students in the various minority groups, in both the University and the State University. Conversely, Black men and Chicano women appear to be least well represented, at least in comparison with their enrollment levels in the Community Colleges.

Eighty percent of the transfer students had completed at least two consecutive semesters or quarters in a Community College before transferring, and about one-third had been awarded an associate degree. In the Open Door sample, only 8 percent received an associate degree and 46 percent persisted for two or more consecutive terms (including those who completed the degree). Thus, the transfer students came for the most part from the more traditional, "persisting" groups of Community College students.

How Good Was Their Community College Record?

A majority of the transfer students (nearly two-thirds of the University transfers and one-half of the State University group) had been enrolled fulltime in the Community Colleges--that is, for at least twelve units each term. Only 10 percent of the University and 17 percent of the State University transfers had had only one Community College course per term (one to three units). Many in the latter groups were either high school students enrolled in Community College courses on a limited basis, or transfer students from other institutions who intended to transfer again.

Nearly one-third of the students completed two years in the Community College before transferring, and 22 percent had enrolled for two semesters or three quarters. Most transfer students who were not eligible for freshman admission to the University or the State University when they graduated from high school would have been required to complete the equivalent of nearly two full years of coursework in the Community College before transferring. Nearly one-fourth of the transfers had been enrolled for more than two years in the Community College, many of them on a part-time basis.

Fifty-three percent of the transfer students had Community College grade-point averages of B (3.0) or better, including 63 percent of the University and 50 percent of the State University transfers. An additional 27 percent had grade-point averages above 2.4 (now the minimum for "freshmen ineligibles" transferring to the University) but below B. Three percent were reported to have earned Community College averages below C in work accepted for transfer credit; most of these students would have had to be admitted by special action. Some appear to have been transfer students into the Community Colleges, where they did a limited amount of poor work after having earned good grades elsewhere (thus producing a cumulative average of at least C).

What Did They Do After Transfer?

Twenty-seven percent of the University transfer students and 57 percent of the State University group were awarded transfer credit equivalent to at least two full years of coursework. Both segments have a limit of 70 semester or 105 quarter units (somewhat more than two years) of work that can be transferred from a Community College. Only 8 percent of the State University and 26 percent of the University students transferred with less than one year of credit from the Community College.

About 40 percent of the State University transfer students earned grade-point averages of B and above after transfer, both in the first term and cumulatively. Somewhat fewer than one-half had averages between B and C, and about 17 percent were below C. Women tended to earn higher grade-point averages than men in the State University,

and recorded smaller percentages with averages below C. No information was available for 18 percent of the transfer students, most of whom had enrolled for only one term, or less if they did not complete the term. One-third of the students who transferred to the University earned grade-point averages of B or better, and 12 percent had averages below C. The remaining 55 percent of the averages fell between B and C.

Grade-point differentials are also a measure of success for transfer students, with small and positive differentials indicating good performance after transfer. In fact, nearly one-half the changes were losses or gains of a half grade point or less. In the State University, 36 percent of the students earned higher grades and 13 percent the same level of grades after transfer, compared with 17 and 7 percent, respectively, for the University students. Fifty-one and seventy-six percent of the transfer groups, respectively, had lower grade-point averages after transfer. However, in both segments the losses and gains were less than a half grade point for at least 50 percent of the students with changes in grade-point averages.

Rates of persistence were difficult to calculate because students transferred at different times in the follow-up study, and the study ended while many were still enrolled. However, the analysis of enrollment patterns showed that about 15 percent of the State University transfer students were enrolled for one year or less and probably terminated their enrollment without completing baccalaureate degree requirements. About 17 percent of the transfer students completed at least two regular terms before dropping out. The best estimate from the data was that 38 percent completed baccalaureate degree requirements before the State University follow-up ended in Spring 1977, and that 30 percent were still enrolled and might well receive the degree during the next year.

The majors chosen most often by State University transfer students were Business and Management, Education (including Liberal Arts majors with teaching credentials), and Social Sciences. Percentages of students in Mathematics and Physical Sciences were very small. Information about the majors of transfer students to the University was too incomplete to warrant analysis.

What Do The Findings Add Up To?

Findings from the transfer student study generally support the conclusion from the Open Door study that the California Community Colleges have become in a sense bifurcated institutions--the traditional two-year college with programs leading to degrees, certificates, and transfer, and a postsecondary institution for older, part-time students with different kinds of educational objectives. The two student bodies use the same facilities, are taught by the same faculty, are often enrolled in the same courses,

but differ with respect to their enrollment patterns and performance. The transfer students in the study came primarily from the more traditional "persisting" student group that constituted about one-half of the Community College enrollment at the time of the study.

The transfer function is still significant in the California Community Colleges, although the continuing education function for part-time students with different objectives has been growing very rapidly, to the point that it has become the dominant function. Still, with eligibility to the University and the State University restricted at the freshman level to the top one-third of the high school graduates, the Community Colleges have been enrolling many "ineligible" but potentially successful baccalaureate degree students who qualified for enrollment with advanced standing in the University or the State University. The Community Colleges offer transfer opportunities to still other students who would qualify for freshman admission elsewhere but want to attend a college near home for a year or two, at relatively low cost, or a smaller institution than most university campuses.

Relatively few Community College students transferred to the University in the mid-1970s, compared with the State University. Possible reasons for this low rate of transfer are lack of information about University requirements; failure to make up subject deficiencies from high school; inadequate funds to attend the University, particularly when students would have to live away from home; lack of information about eligibility for and availability of student aid; and lack of interest in what the University offers. Students who attended Community Colleges located farthest from a University campus appeared to be least likely to transfer.

Women were generally underrepresented in the transfer groups, although participation rates in the Community Colleges were about equal for men and women. Women earned Community College grades which were at least as high as those earned by men, and those who transferred earned grades somewhat higher. Their persistence in the Community Colleges, at least among the younger students who were most likely to transfer, was as good as that found for male students. However, the women appeared to be less likely than to transfer into baccalaureate degree programs.

The grade-point averages earned by the Community College students after transfer were satisfactory for a large majority of the students, in terms of their being in good academic standing after transfer and experiencing a relatively small drop in grade-point average. Transfer students usually expected a drop in their grades immediately after transfer because of the adjustment most had to make to a new living/learning environment. Information for the University was aggregated for all terms for which the students were enrolled, thus making it difficult to draw conclusions about the

incidence of academic probation among transfer students to the University.

Finally, the computerized student data bases that were available for the follow-up study were inadequate to do a definitive study of the transfer students, particularly in the University. Major problems included inaccurate data and entries for units and grade points earned being one term behind actual enrollments. In other words, credit and grade points earned for one term were entered into the computer at the beginning of the next term in which the student was enrolled. Thus, little information was available for students who were enrolled for only one term, and graduation had to be inferred for students enrolled for a final term during which they would probably earn enough credit to graduate. In any case, the study was undertaken in the absence of any recent follow-up study of transfer students from the California Community Colleges, and because of the great advantage of having information from the Community Colleges dating back to 1972 that could be used in analyzing the characteristics of students who did and did not transfer through much of the 1970s.

VI. PROSPECTS

There are a number of indications that Community College transfer students will be the focus of much more attention in the early 1980s than in the 1970s, when governing boards, the Legislature, and faculty groups were all concerned with the quality of the preparation of first-time freshmen in the University and the State University. The 1978-79 California State Budget Act contained language requesting the University, State University, and Community Colleges to prepare a joint report on efforts to increase the rate and retention of certain groups of transfer students, including a proposal to identify potential transfers from underrepresented groups. The report was to have been made to the Commission by February 1, for transmission to the Legislature by March 1 with Commission staff comments. (The report and staff comments will be given to the Commission for information.) This year the Legislative Analyst recommended that the Community College Chancellor's Office, with the help of the University and the State University, identify numbers of eligible transfer students, numbers who actually transfer, and their subsequent progress in the University and the State University in comparison with students who began as freshmen. Furthermore, the University has instituted a system of reporting to each Community College and statewide on the numbers and grade-point averages of transfer students by University campus and statewide. The State University has been urged to adapt a similar reporting system.

Furthermore, student affirmative action efforts in all segments appear likely to increase the transfer rates of Community College students from racial/ethnic minority groups. For the first time, transfer students with prior college credit have become eligible for federally funded student aid. This change in regulations should also increase the numbers of low-income Community College students who transfer, as information about such aid is disseminated more widely.

The report on Community College Students Who Transfer is a first step in gaining insights into the nature and performance of transfer students. The Intersegmental Task Force on Admissions and Articulation reviewed the report at its April meeting, together with a draft of the joint intersegmental report on improving transfer student opportunities. There appears to be no need for recommendations to be made at this time in the transfer study report, since the Task Force will be addressing questions of both the need for further research and the examination of current practices and policies.

FOOTNOTES

- 1/ Postsecondary Education in California, Information Digest, 1978, pages 42-43.
- 2/ 1976 High School Eligibility Study (Technical Report), pages 32 and 42. (Sacramento, California Postsecondary Education Commission, 1976).
- 3/ Data for the five Community Colleges which could not provide the Social Security numbers that were needed for the matching of transfer student records were omitted from Table 4.

APPENDIX A

List of California Community Colleges in the Transfer Study

American River College
Bakersfield College
Butte College
Cabrillo College
Diablo Valley College
Fresno City College
Glendale College
Grossmont College
Laney College
Los Angeles City College
Los Angeles Trade-Tech.
Marin College
Merritt College
Monterey Peninsula College
Moorpark College
Mt. San Antonio College
Napa College
Pasadena City College
Porterville College
Sacramento City College
San Bernardino Valley College
San Diego City College
Santa Ana College
Santa Barbara City College
Shasta College
Southwestern College

APPENDIX B

University of California Student Performance Summaries

The University of California recently resumed the annual reporting of grade-point averages earned by new students from California high schools and community colleges. A task force appointed in February 1978 by the University studied its responsibility for providing such information and made recommendations last summer which led to the development of the reports for 1976-77 and 1977-78.

The recommendation to develop the report was based on the premise that the University has a responsibility to provide high schools and community colleges with information on the performance of their graduates in the University, and with data for assessing the effectiveness of their curricula in preparing students for university level work.

Each high school and community college now receives information annually on the number of former students enrolled as first-time freshmen or new transfer students in the University, the mean entering grade-point average, the mean University grade-point average for the academic year, and the mean differential between the two averages. In addition, community colleges receive information about groups of transfer students who would have been considered in the categories of "eligible" or "ineligible" for University admission as freshmen. Summary information is provided for each University campus, as well as systemwide.

The summary released by the University in December shows that first-time freshmen entering the University in Fall 1977 with a mean high school grade-point average of 3.62 (A-) earned a mean University grade-point average of 2.85 (B-). The mean differential was -.77, or less than a grade point. There was little change from 1976-77.

The mean community college grade-point average for transfer students who would have been eligible for University freshman admission upon high school graduation was 3.35 (B+) for the Fall 1977 transfers; they earned a mean University grade-point average of 2.88 (B-), with a differential of -.47 (less than half a grade point). The "ineligible as freshmen" group entered the University with a community college grade-point average of 3.10 (slightly above a B) and earned a University average of 2.63 (B-), with the same differential of -.47.

According to University statistics, 55 percent of the transfer group would not have been eligible for freshman admission at the time of

high school graduation, because of subject deficiencies or poor grades, or both. On the other hand, 45 percent of the transfer students could have attended the University as freshmen, in terms of eligibility for admission, but, instead, enrolled in a community college. The University summary for community college transfer students also shows that 35 percent of the group earned a grade-point average of 3.00 (B) or better at the University, while 15 percent had grade-point averages below C (1.99 or below) during their first year.

THE UNIVERSITY OF CALIFORNIA
OFFICE OF THE ASSISTANT VICE PRESIDENT
STUDENT ACADEMIC SERVICES
OFFICE OF OUTREACH SERVICES

Scholarship Record of Fall 1977 Community
College Entrants for the 1977-78 Academic Year

	<u>Mean Entering</u> <u>Grade Point Average</u>		<u>Mean University</u> <u>Grade Point Average</u>		<u>Mean Differential</u>	
	<u>Eligible</u>	<u>Ineligible</u>	<u>Eligible</u>	<u>Ineligible</u>	<u>Eligible</u>	<u>Ineligible</u>
Berkeley	3.44	3.26	2.97	2.72	-.47	-.54
Davis	3.36	3.16	2.87	2.61	-.49	-.55
Irvine	3.28	3.13	2.95	2.98	-.33	-.15
Los Angeles	3.30	3.02	2.73	2.54	-.57	-.48
Riverside	3.35	3.08	3.09	2.75	-.26	-.33
San Diego	3.35	3.03	2.87	2.52	-.48	-.51
Santa Barbara	3.29	3.05	2.90	2.63	-.39	-.42
Santa Cruz	3.39	3.17				
*Total	3.35	3.10	2.88	2.63	-.47	-.47

*Santa Cruz is not included in total figures.

December 1978

THE UNIVERSITY OF CALIFORNIA
OFFICE OF THE ASSISTANT VICE PRESIDENT
STUDENT ACADEMIC SERVICES

SYSTEMWIDE

Grade Point Averages of Students at the University of California
Classified by Entering G.P.A.
1977 - 1978

Students from Community Colleges Eligible and Ineligible at High School Graduation

U.C. G.P.A.	0.00 - 0.99		1.00 - 1.99		2.00 - 2.99		3.00 - 4.25		Total Group	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
<u>Entering G.P.A.</u>										
0.00 - 1.99										
Eligible	0	.00	0	.00	0	.00	0	.00	0	.00
Ineligible	0	.00	0	.00	0	.00	0	.00	0	.00
Total	0	.00	0	.00	0	.00	0	.00	0	.00
2.00 - 2.25										
Eligible	0	.00	6	31.58	13	68.42	0	.00	19	.91
Ineligible	16	16.00	41	41.00	39	39.00	4	4.00	100	3.91
Total	16	13.45	47	39.50	52	43.70	4	3.36	119	2.56
2.26 - 2.50										
Eligible	8	10.67	18	24.00	43	57.33	6	8.00	75	3.59
Ineligible	14	7.07	88	44.44	91	45.96	5	2.53	198	7.75
Total	22	8.06	106	38.83	134	49.08	11	4.03	273	5.88
2.51 - 2.75										
Eligible	5	3.01	30	23.44	85	66.41	8	6.25	128	6.12
Ineligible	9	2.59	87	25.00	221	63.51	31	8.91	348	13.62
Total	14	2.94	117	24.58	306	64.29	39	8.19	476	10.25
2.76 - 3.00										
Eligible	2	.76	50	18.94	177	67.05	35	13.26	264	12.43
Ineligible	13	2.88	93	20.62	287	63.64	58	12.86	451	17.64
Total	15	2.10	143	20.00	464	64.90	93	13.01	715	15.39
3.01 - 3.25										
Eligible	4	1.04	42	10.97	247	64.49	90	23.50	383	18.33
Ineligible	8	1.76	75	16.48	281	61.76	91	20.00	455	17.80
Total	12	1.43	117	13.96	528	63.01	181	21.60	838	18.04
3.26 - 3.50										
Eligible	1	.25	20	4.91	207	50.86	179	43.98	407	19.47
Ineligible	7	1.56	41	9.13	223	49.67	178	39.64	449	17.57
Total	8	.93	61	7.13	430	50.23	357	41.71	856	18.42
3.51 - 3.75										
Eligible	3	.69	10	2.29	157	36.01	266	61.01	436	20.86
Ineligible	2	.61	7	2.14	141	43.12	177	54.13	327	12.79
Total	5	.66	17	2.23	298	39.06	443	58.06	763	16.42
3.76 - 4.25										
Eligible	0	.00	5	1.32	67	17.72	306	80.95	378	18.09
Ineligible	0	.00	2	.88	45	19.74	181	79.39	228	8.92
Total	0	.00	7	1.16	112	18.48	487	80.36	606	13.04
Total Group										
Eligible	23	1.10	181	8.64	996	47.64	890	42.58	2,090	100.00
Ineligible	69	2.70	434	16.98	1,328	51.96	725	28.36	2,536	100.00
Total	92	1.98	615	13.24	2,324	50.02	1,615	34.76	4,646	100.00

APPENDIX C

ABSTRACT from Those Who Stay: Student Continuance in the California State University and Colleges. Technical Memorandum No. 6, June 1976. Division of Institutional Research, Office of the Chancellor, The California State University and Colleges.

The report was the first in a series on enrollment patterns and continuation rates of students at the California State University and Colleges. By matching Social Security numbers with data on Student Information Records submitted by each campus, the study tracked students at the State University from Fall 1973 through Fall 1975. It was the intent of the State University to continue tracking these students as data for additional years were added to the Enrollment Reporting System.

The report presents continuation rates for first-time freshmen and transfer students by sex and ethnic group. Two serious limitations in the data were the absence of information about students who transferred between campuses and those who graduated during the two-year period of tracking. Therefore, the continuation rates that were reported are probably an underestimate of the percentages of students who persisted to graduation.

The following are selected findings from the report concerning transfer students. With one exception, data were combined for transfer students from all types of collegiate institutions.

Findings from Table 1:

1. Of the 8,885 sophomore transfers entering in the Fall 1973 term, 48.4 percent were still enrolled on the same campus in the Fall 1975 term. Since most students would not have been eligible to graduate before Fall 1975, the 51.6 percent unmatched records was significant insofar as the students probably transferred to another campus or left the system.
2. Of the 26,566 students who transferred to the State University as juniors in the Fall 1973 term, 46.3 percent were still enrolled at the same campus in Fall 1975. The percentage that graduated between Fall 1973 and Fall 1975 was not determined. The percentages showed a significant drop, however, from the 65.5 percent that had been enrolled the previous term, that is, Spring 1975.
3. As expected, a much smaller percent (30.7) of the students who transferred as seniors in the Fall 1973 term were enrolled for

the Fall 1975 term. Only 2,801 students were enrolled as senior transfer students in Fall 1973.

4. When transfer students from Community Colleges were looked at separately, a continuation rate of 47.7 percent was obtained for the 15,250 students (for all class levels combined). Eighty-four percent of the undergraduate transfer students were from Community Colleges in the Fall 1973 term.
5. Forty-two percent of all undergraduate transfer students and 41 percent of the Community College transfers in Fall 1973 were women. Continuation rates were about equal for men and women in the various groups analyzed, except for transfers at the senior level for whom a lower continue rate was obtained for women. It is possible that a larger percentage of women than men graduated before Fall 1975, perhaps with majors or degrees that could be completed in a shorter period of time.

Findings from Table 3:

Fifty-five percent of the Oriental students who transferred to the State University as juniors in Fall 1973 were still enrolled in the Fall 1975 term, compared with 52 percent of the Mexican-American students, 49 percent of the Latin-American students, 48 percent of the Blacks, 46 percent of the Caucasians, and 37 percent of the American Indians. The continuation rate for students for whom no ethnic information was available (one-third of the group) was 46 percent.

UNIVERSITY OF CALIF.
LOS ANGELES

JUL 20 1979

CLEARINGHOUSE FOR
JUNIOR COLLEGES

TABLE 1

CONTINUATION RATES OF FALL 1973 CSUC STUDENTS
BY YEAR, TERM AND SEX

<u>Student Level</u>	<u>Sex</u>	<u>Fall 1973 Enrollment</u>	<u>Spring 1974 Rate</u>	<u>Fall 1974 Rate</u>	<u>Spring 1975 Rate</u>	<u>Fall 1975 Rate</u>
First-Time Freshman	Male	10,366	0.873	0.702	0.643	0.540
	Female	11,713	0.876	0.714	0.648	0.540
	Total	22,079	0.875	0.708	0.647	0.540
Sophomore Transfer	Male	4,993	0.822	0.660	0.604	0.484
	Female	3,892	0.816	0.659	0.600	0.485
	Total	8,885	0.820	0.660	0.602	0.484
Junior Transfer	Male	15,633	0.844	0.721	0.659	0.465
	Female	10,933	0.827	0.712	0.653	0.461
	Total	26,566	0.837	0.717	0.655	0.463
Senior Transfer	Male	1,616	0.801	0.576	0.473	0.324
	Female	1,185	0.782	0.539	0.420	0.284
	Total	2,801	0.793	0.560	0.451	0.307
Post-Baccalaureate & Graduate	Male	32,898	0.716	0.453	0.357	0.246
	Female	29,640	0.729	0.442	0.347	0.244
	Total	62,538	0.722	0.448	0.353	0.245
Community College Transfer	Male	18,975	0.843	0.710	0.649	0.477
	Female	12,997	0.826	0.699	0.640	0.477
	Total	31,972	0.836	0.705	0.645	0.477

TABLE 3

CONTINUATION RATES OF FALL 1973 CSUC JUNIOR TRANSFERS
BY ETHNIC GROUP, YEAR, AND TERM

<u>Ethnic Group</u>	<u>Fall 1973 Enrollment</u>	<u>Spring 1974</u>		<u>Fall 1974</u>		<u>Spring 1975</u>		<u>Fall 1975</u>	
		<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>
American Indian	164	126	0.768	100	0.610	92	0.561	60	0.366
Black	967	795	0.822	683	0.706	608	0.629	466	0.482
Mexican American	887	744	0.839	626	0.706	595	0.671	481	0.520
Latin American	187	159	0.850	144	0.770	123	0.658	92	0.482
Oriental	807	716	0.887	629	0.779	578	0.716	447	0.554
Other Non-White	132	112	0.848	99	0.750	87	0.659	58	0.439
Caucasian	13,798	11,645	0.844	10,001	0.725	9,138	0.662	6,275	0.455
All Other Responses	374	326	0.872	282	0.754	239	0.639	167	0.447
No Response	9,250	7,811	0.823	6,497	0.702	5,931	0.641	4,282	0.463
Totals, All Ethnic Groups	26,566	22,234	0.837	19,061	0.717	17,391	0.655	12,308	0.483